



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,362	11/14/2001	Jun Akiyama	56693 (70904)	5592
21874 7590 05/07/2008 EDWARDS ANGELL PALMER & DODGE LLP P.O. BOX 55874 BOSTON, MA 02205			EXAMINER POLTORAK, PIOTR	
			ART UNIT	PAPER NUMBER
			2134	
			MAIL DATE	DELIVERY MODE
			05/07/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/992,362	AKIYAMA, JUN	
	Examiner	Art Unit	
	PETER POLTORAK	2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 16-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-14 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) 17-24 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)
2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____. | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) <input type="checkbox"/> Notice of Informal Patent Application
6) <input type="checkbox"/> Other: _____. |
|---|--|

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/3/08 has been entered.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

Response to Amendment

2. Applicant's remarks have been carefully considered. Applicant amended claims to address 35 U.S.C. 112 rejections. In particular, applicant's newly introduced limitation clarify that it is "the encryption data recording region" that is rewritable ("the encryption data recording region is configured to be rewritten with the encryption information"). As a result, the 35 U.S.C. 112 rejections cited in the previous Office Action are withdrawn.
3. Applicant's arguments with respect to newly introduced limitations (claims 1-2, 11 and 16) have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

4. "User" in claim 3 should read either "a user" or "users".
Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. Claims 1-9, 11-14 and 16 are rejected under 35 U.S.C. 103(a) as being obvious over Nagai (USPN 6938162) in view of Inazawa (U.S. Patent No. 6587948) and further in view of Tosaki (WO 00/07182).

As per claims 1-2, 7-8 and 11 Nagai discloses encrypting information (user data) in data recording region (user data area, 102) using the encryption information (descramble keys) which was reproduced in the second format from the encryption data recording region (key management information area, 107) in a recording medium (disc, Fig. 1), wherein the recording system is rewritable recording system (e.g. Fig. 19) and the encryption data recording region is configured to be rewritten with the encryption information (col. 16 lines 14-15).

6. Nagai does not teach that the encryption information is different for different disks, such that the encryption information recorded on each disk is different.

Inazawa disclose the encryption information is different for different disks, such that the encryption information recorded on each disk is different (Inazawa et al., col. 6 lines 8-10). One of ordinary skill in the art at the time of applicant's invention would have been motivated to employ the encryption information that is different for different disks, such that the encryption information recorded on each disk is different given benefits of tracking and additional copyright protection.

Even if Nagai in view of Inazawa did not teach that the second format and the first format differ from each other in at least one of recording density, error correcting

system and defect management system, (for example the limitation requiring that the first format differ from each other in recording density)

7. Nagai in view of Inazawa do not teach that the first format differ from each other in a recording density. Thus, Nagai in view of Inazawa also do not explicitly teach that the first format (the data recording region) differs from the second format (the encryption data recording region in at least one of recording density, error correcting system and defect management system and, as a result, as per the limitations of claim 4-5 and 12-13, Nagai in view of Inazawa do not teach that the recording density of the second format is lower than that of the first format and that the second format reproduces information with a better reproduction quality than the first format. Tosaki discloses the recording density of the second format (the area storing the encryption data recording region) being lower than the first format (the data recording region, col. 3 lines 1-2 and col. 2 lines 48-50). Although higher data density allows to store more information in data region, it affects negatively quality of data reproduction (higher density results in lower reproduction quality, see Nakane 6091699, for example). An ordinary artisan in the art of data recording would readily recognize that user data such as music, movies, etc., require much more space than "support" data (e.g. encryption information, metadata etc.). At the same time, unlike the user data, in which problems with subset of data does not affect the overall data, any problems with the support data could impact the reproduction of all user data (e.g. corrupted decryption key would not allow decryption of all encrypted user data). Thus, while the ordinary artisan would seek maximization of amount data, which can

be accomplished by using a higher density format (note a progression from legacy CDs to higher density CDs such as DVDs in order to accommodate increasing demand for user data space, for example), ensuring to preserve the quality of the support data, such as the encryption data disclosed by Nagai (and Tosaki) would clearly be more important than maximization of the amount of the support data stored in the region.

Thus, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to ensure that the second format reproduces information with a better reproduction quality than the first format given the benefit of saving space in the first data format region while ensuring the proper (usable) reproduction of the data kept in the first format region.

8. The limitations of claim 6 are inherent; Nagai explicitly disclose that the invention is relevant to disks such as CD and DVD (e.g. col. 1 lines 26-49), and any data (such as keys disclosed by Nagai) recorded on recording medium such as CD and DVD is recorded at the plural different positions in a circumferential direction.
9. As per claim 3, recording regions are blank before information is recorded.
10. As per claims 9 and 14, density is influenced by signal modulation; thus, recording to two different density regions would inherently require two different types of modulation.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571) 272-

Art Unit: 2132

3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Peter Poltorak/

Examiner, Art Unit 2134

/Benjamin E Lanier/

Primary Examiner, Art Unit 2132